



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

Maureen F. Gorsen, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721



Arnold Schwarzenegger
Governor

March 7, 2006

Mr. Doug Mosteller
Cherokee Simeon Venture I, LLC
4600 S. Ulster Street, Suite 500
Denver, Colorado 80237

Dear Mr. Mosteller:

The Department of Toxic Substances Control (DTSC) received the Current Conditions Summary Report for Lot 3, Campus Bay, 1200 South 47th Street Richmond, California (July 29, 2005), and the Lot 3 Field Sampling and Analysis Plan, Campus Bay Site, Former Zeneca, Inc., Richmond Facility, Richmond, California (November 2, 2005). Both reports were prepared by LFR Levine-Fricke on behalf of Cherokee Simeon Venture I, LLC, Zeneca, Inc., and Bayer CropScience, Inc., collectively known as the Respondents to DTSC's Site Investigation Order (Docket No. 04/05-006). The Current Conditions Summary Report for Lot 3 provides a description of the Zeneca/Former Stauffer Chemical Site, summary of previous site investigations, summary of previous conceptual site models and remedial actions, a description of current site conditions, and an evaluation of data gaps. The field sampling plan describes the sampling methods and sample locations to fill the data gaps identified in the current conditions reports.

DTSC has reviewed the reports and have the following comments:

Current Conditions Summary Report

1. A tidal influence study should be conducted to determine tidal impacts, if any on groundwater at the site.
2. Please include the analysis of the composition of the alum waste material that was found at the Site.
3. It would be helpful to the reader if when the text references an appendix and that appendix if further subdivided, that the specific appendix and subdivision is provided. (e.g. Appendix D, attachment D-1).
4. The text needs to include clarification when it is reported that samples were not found above reporting limits. In these cases, it needs to be clarified whether the laboratory reporting limits were above or below the screening levels. For example, benzene in sample WRC1-14-4 was found to be below its detection limit of 1,300

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ug/kg, but the screening value is 640 ug/kg. Detection limits of SVOCs in excavated areas were also found to be elevated. If reporting limits are found to be elevated above screening values, this should be identified as a data gap if no additional samples were collected.

5. Please describe any written protocols that were established during building demolition regarding investigation of areas where contamination is observed or features that may have contained hazardous substances (e.g., sumps, buried lines, etc.).
6. DTSC has received information that drums were buried and may have been removed from within Lot 3 (see attached figure). Please submit information associated with any construction work that may have occurred within this area (e.g., storm lines, etc.) A magnetometer survey of this area should also be conducted to determine whether there are any buried metal objects in this location.
7. Page ix, Executive Summary and Page 77, Section 6.4.6, Temporary Cap: Both sections state that a temporary cap material known as Kuma Type II Hydroseal was applied to the site. The components of the Kuma material are identified in Section 6.4.6 as "water, cellulose fibers, binders, cement, and special amendments." Please specify what specific special amendments were used in the mixture sprayed at the Site.
8. Page xvii, Long-Term Effectiveness: It should be re-stated in this section that the long-term effectiveness evaluation is in relation to a commercial/industrial use scenario.
9. Page xviii, Evaluation of Lot 3 Current Conditions: The exposure pathways evaluated in the report should also include future construction and maintenance workers who might come into direct contact with groundwater.
10. Page xxiv, Data Gap Analysis and Conclusions, second bullet item: In order to determine whether there are any seasonal variations in soil gas concentrations, an additional soil gas sampling event will be necessary in the summer of 2006.
11. Page 9, Section 2.1., California Regional Water Quality Control Board, third paragraph: Please include the dimensions of the former groundwater extraction trench and to what depth it was installed.
12. Page 18-19, Section 3.2, Chemical Use and Waste Generation: Please specify where the waste identified in this section was stored. Also, identify the location of the "drum storage area" or reference the appropriate figure identifying its location.
13. Page 20, Section 3.4, Former Pilot Plan Tank Farm and Agricultural Chemical Offloading Area: Please specify and identify on a figure where the chemical off-loading area was formerly located and how the chemicals were transferred from the railcars to tanks (e.g. hoses, etc.).
14. Page 23, Former Ag Yard Pond: This section states that the former Ag Yard Pond was excavated to a depth of 9 feet, backfilled and then capped with asphalt. Please state whether any confirmation samples were collected from the excavated area, the source of the backfill material and whether the area is still capped.
15. Page 24, Section 3.5, Underground Storage Tanks: It does not appear that this section reflects the number or location of underground tanks that appear on Sanborn maps. For example, the 1930-1950 Sanborn Map (Richmond, CA Volume 2, section 224) identifies a 12,000 gallon underground oil tank where the

- Griffin Chemical Company previously existed. Section 223 identifies a 4,000 gallon oil tank on the Stauffer Chemical Company Site, and "oil tanks in ground" on the Wheeler, Reynolds & Stauffer Co. property. The Sanborn maps should be reviewed again and the information included in this report.
16. Page 28, Revised Hydrogeologic Assessment Report (The Mark Group 1991b): Please state whether the gravel layer found beneath the liner is still present or whether this layer was excavated during the cleanup. It was also reported that groundwater was detected 19 inches below the bottom of the Ag Yard Pond. The results of any groundwater samples should also be provided in this section.
 17. Page 62, Section 6.3.1, Odor areas POI-7, POI-8, POI-11 and RPA-6b all exhibited odors and elevated PID readings, but were not excavated as soil samples were below action levels. Please describe how the concentrations found in the soil samples compare to the residential screening levels.
 18. Page 63, Soil Excavation, second bullet item: Please state the instrument detection limit for carbon disulfide and the rationale for using the detection limit as the cleanup goal.
 19. Page 64, Confirmation Soil Sampling, second paragraph: This section states that no confirmation samples were collected from "smaller excavation area" where concentrations did not exceed screening criteria. Please discuss how these concentrations compare to the residential screening levels.
 20. Page 64, Backfilling and Compaction: Please state the acceptance criteria that were used for the backfill.
 21. Page 65, Groundwater: This section states that the groundwater was remediated to SSTLs, but does not describe how they compare to other standards such as MCLs.
 22. Page 66: The Excavation Summary table identifies "mercury leachability" as a QA/QC criteria. Please explain what this means.
 23. Page 66, Last Paragraph: Please clarify that the planned implementation measures identified on this page were previously approved by the Water Board and are subject to modification by DTSC.
 24. Page 68, Excavation, second paragraph: Please state whether the asphalt and concrete imported from the UC Richmond Field Station was tested prior to crushing and recycling. If the material was sampled, please identify the sampling results. Also, please identify the type(s) of contaminants that were found in the round and rectangular ponds located on the UC property.
 25. Page 78, Section 6.4.7, Storm-Water Management: The terminology used in this section and that used in the legend on Figure 9 need to be made consistent. For example, the text describes the low-flow interceptor trench installed in 2002, but Figure 9 depicts a storm drain installed in 2003. Figure 9 also does not show the flow of storm water to the lower lagoon and to East Stege Marsh.
 26. Page 89, Section 7.0, Current Conditions:
 - a. Third Bullet Item: Please provide the sample data on the fill material or provide the reference to its location in this report.
 - b. Bullet items 4 and 5 appear to contradict each other. Item 4 states that the first encountered groundwater is between approximately 0 and 10 feet bgs, while item 5 states that first encountered groundwater is from 10 to 25 feet

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bgs. If groundwater is now between 0 and 10 feet bgs does this mean that some of the treated cinders are now within groundwater? Please clarify these two items.

27. Page 90, third bullet item: Please describe the evidence that there is no downward hydraulic gradient.
28. Page 92, Section 7.1.1, Soil: The potential impact of not converting the sample concentrations to dry weight should be discussed.
29. Page 93, Section 7.1.3, Groundwater: More detail regarding TDS measurements located across the site needs to be provided. In addition, the rationale for using 10 times the NAWQC should be provided.
30. Page 97, VOCs: Table 2 should be reviewed to ensure that the California- Modified PRG was used. For example, the naphthalene concentration identified on Table 2 is 56 mg/kg, while the residential "CAL-Modified PRG" is 1.7 mg/kg. The concentration for arsenic (0.39 mg/kg) should also be revised to 0.062 mg/kg (the CAL-Modified PRG).
31. Page 104, Exceedances Located at Greater Than 5 Feet BGS: The second table indicates a range of detections for methylene chloride, but only one location was identified on the table. Please revise the table or clarify how there could be a range of concentrations.
32. Page 110, Section 7.5, Redevelopment for Commercial/Industrial Use or Residential Use: DTSC cannot agree at this time with the first sentence of this section, which states that Lot 3 appears appropriate for commercial reuse. Data gaps exist that need to be filled prior to any determination being made.

Lot 3 Field Sampling and Analysis Plan:

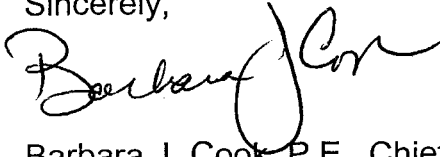
1. Comments from DTSC's Human and Ecological Risk Division (HERD) were previously provided and should be incorporated into the plan.
2. Page 16, Section 4.1, Groundwater Sample Analysis: Sample analysis for groundwater should consider including ethane and ethene in areas where chlorinated volatiles are present to help evaluate breakdown of the contaminants.
3. Page 19, Section 4.4, Soil-Gas Sample Analysis: The California Department of Health (DHS) has requested to DTSC that future soil-gas samples be analyzed for formaldehyde.

DTSC's Geologic Services Unit also reviewed the field sampling plan, and their comments are enclosed with this letter.

If you have any questions regarding this letter, please call me at (510) 540-3843, or Lynn Nakashima of my staff at (510) 540-3839.

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Sincerely,

A handwritten signature in black ink, appearing to read 'Barbara J. Cook', with a large, stylized 'C' at the end.

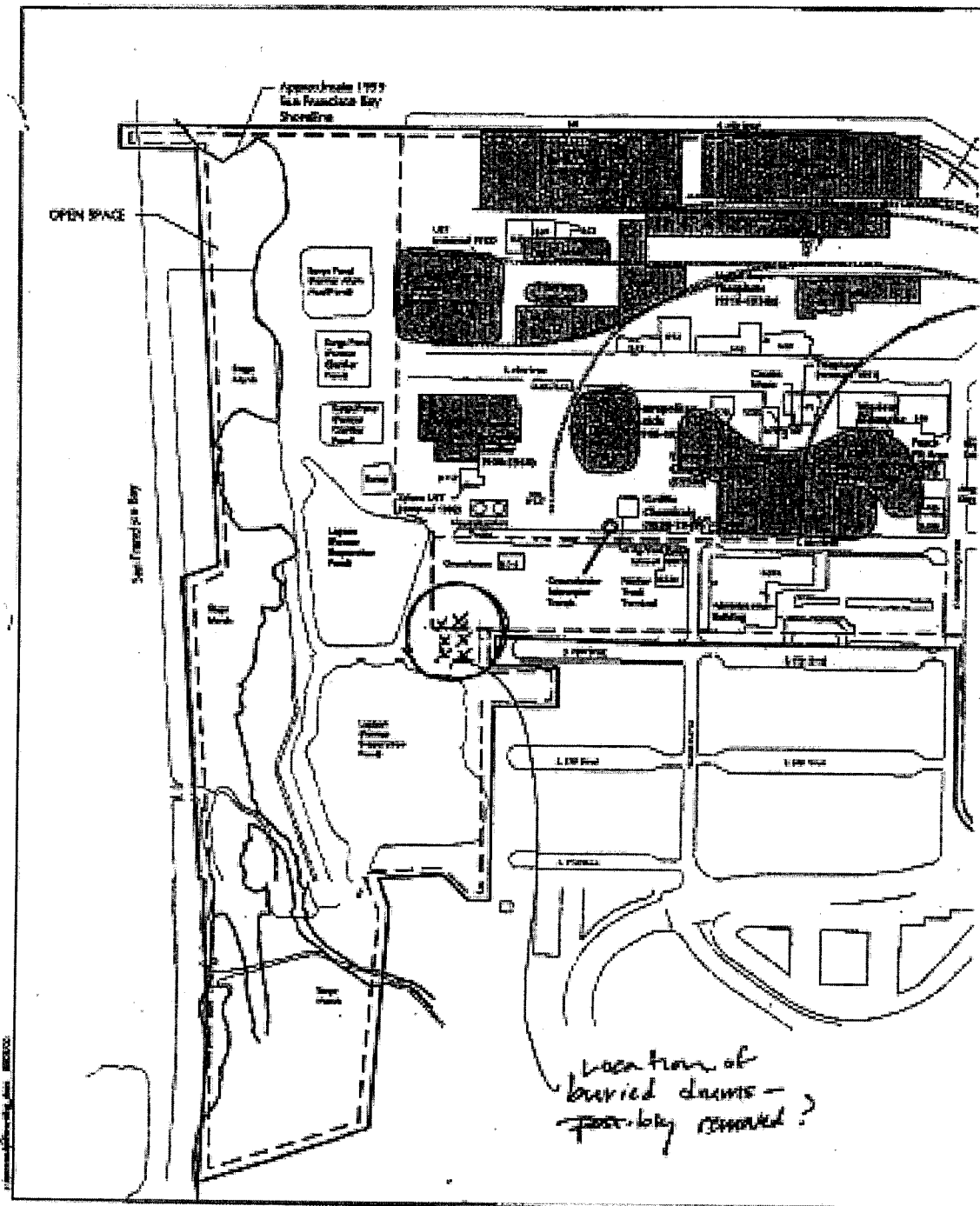
Barbara J. Cook, P.E., Chief
Northern California - Coastal Cleanup
Operations Branch

Enclosures

cc: Ms. Kimi Klein
Human and Ecological Risk Division
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710

Mr. Mark Vest
Geologic Services Unit
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

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Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

8800 Cal Center Drive
Sacramento, California 95826-3200



Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Barbara Cook, P.E.
Chief, Northern California – Coastal
Cleanup Operations Branch
Statewide Cleanup Operations Division
Site Mitigation and Brownfields Reuse Program

Lynn Nakashima
Senior Hazardous Substances Scientist
Northern California – Coastal
Cleanup Operations Branch
Statewide Cleanup Operations Division
Site Mitigation and Brownfields Reuse Program

FROM: Mark Vest, P.G., CEG
Senior Engineering Geologist
Geologic Services Unit

REVIEWED BY: Stewart Black, P.G.
Senior Engineering Geologist
Geologic Services Unit

DATE: December 19, 2005

SUBJECT: GSU Review of the document entitled Lot 3 Field Sampling and Analysis Plan Campus Bay Site, Former Zeneca, Inc., Richmond Facility, Richmond, California (LFR Levine-Fricke, November 02, 2005)

In response to a request by Lynn Nakashima of your staff, the Geologic Services Unit reviewed the subject document (FSAP). The FSAP was prepared by Levine-Fricke for submittal to DTSC on behalf of Cherokee Simeon Venture I, LLC; Zeneca Inc.; and Bayer CropScience Inc. The following comments and recommendations are provided for your information and use.

The document describes work proposed to fill data gaps related to soil, soil gas, and ground water contamination at the Lot 3 area.

Barbara Cook, P.E.
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Comments and Recommendations

1. The comments and recommendations provided in my June 20, 2005 memorandum to you apply to the work proposed at Lot 3 (as well as at Lots 1 and 2). That memorandum comprised a review of the March 30, 2005 Levine-Fricke document entitled Groundwater Monitoring Assessment and Well Installation, Abandonment, and Well Repair Work Plan, Subunit 1 of the Meade Street Operable Unit, Former Zeneca Inc. Richmond Facility Richmond, California. We have not received a response to comments from Levine-Fricke on that memorandum.
2. The reporting section (Section 7.0 Reporting) of the FSAP should be amended to specify preparation of maps and cross sections illustrating the vertical and horizontal distribution and extent of subsurface materials (naturally occurring and engineered fill) and contaminants found at concentrations greater than detection limits with concentrations equal or greater than human and/or ecological health-based criteria highlighted. The figures should illustrate contaminants found in soil, soil gas, and ground water.
3. The work and reporting should also include an assessment of changes to ground water elevations and flow directions potentially associated with the earthwork conducted as part of site investigation and remediation.
4. The relative elevations of ground water and the treated cinders remaining on site should be evaluated with an emphasis on determining if the separation between the two has been maintained.

If you have any questions or need more information about this matter feel free to contact me by telephone at (916) 255-3697 or email at mvest@dtsc.ca.gov.

